

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1-9. (Cancelled)

10. (Previously Presented) An apparatus identifying a disc type, comprising:
a servo controller that enables tracking and focusing;
an RF amplifier that produces a push-pull signal from a light wave reproduced from a disc; and

an LPP signal detector that detects a certain voltage level in the push-pull signal immediately after the servo controller enables tracking;

wherein if the certain voltage level is detected the disc is identified as a DVD(-) type disc and if the certain voltage level is not detected the disc is identified as a DVD(+) type disc,

the LPP detector detects an LPP signal according to detection of the certain voltage level by slicing the push-pull signal at a constant level,

the DVD(-) type discs include DVD-RW and DVD-R discs, and

the DVD(+) type discs include DVD+RW and DVD+R discs.

11. (Original) The apparatus of claim 10, wherein the LPP detector detects an LPP in the push-pull signal by detection of the certain voltage level.

12. (Original) The apparatus of claim 10, further comprising:

a system controller that controls a disc drive and identifies the disc type.

13. (Cancelled)

14. (Original) The apparatus of claim 10, further comprising:

an optical detector that detects the light wave reflected from the disc.

15. (Original) The apparatus of claim 14, wherein the optical detector comprises:

a structure divided into four sections having a first photodiode, a second photodiode, a third photodiode, and a fourth photodiode.

16. (Original) The apparatus of claim 10, wherein the RF amplifier comprises:

a current-to-voltage converter having a first amplifier, a second amplifier, a third amplifier, and a fourth amplifier, wherein the four amplifiers convert output signals from corresponding first through fourth photodiodes of the optical detector to voltage values; and

a push-pull operator having a first adder, a second adder, and a subtracter, wherein the first adder adds output signals of the first amplifier and the second amplifier to produce a first added signal, the second adder adds output signals of the third amplifier and the fourth amplifier to produce a second added signal, and the subtracter adds the first added signal and the second added signal to produce the push-pull signal.

17. (Cancelled)

18. (Original) The apparatus of claim 10, further comprising:

an optical detector having a bi-sectional structure that includes a first photodiode and a second photodiode.

19-22. (Cancelled)